UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/525,664	02/25/2005	Makio Yamaki	450100-05126	7984	
William S Fron	7590 07/14/200 nmer	EXAMINER			
Frommer Lawre	ence & Haug	LU, KUEN S			
745 Fifth Avent New York, NY			ART UNIT	PAPER NUMBER	
				2156	
			MAIL DATE	DELIVERY MODE	
			07/14/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/525,664	YAMAKI, MAKIO				
Office Action Summary	Examiner	Art Unit				
	KUEN S. LU	2156				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>01 Ma</u>	av 2009					
	action is non-final.					
	/					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
ologod in addordance with the practice and c	x parte gaayle, 1000 G.B. 11, 10	0.0.210.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-7</u> is/are rejected.						
7) Claim(s) is/are objected to.						
• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>1 May 2009</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
TT) The path of declaration is objected to by the Ex-	anniner. Note the attached Office	Action of form FTO-192.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☑ Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. Solution of Informal Patent Application						
B) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application Other:						
1 apor 110(0)/mian bate						

Art Unit: 2156

DETAILED ACTION

1. The Action is responsive to Applicant's Amendment filed May 1, 2009. It is recognized that amendments were made to abstract, claims 1 and 6-7. As necessitated by the amendments, Examiner hereby withdraws objections to abstract. However, Examiner maintains 35 U.S.C. § 101 rejections to claim 1, please see Examiner's

rationale further detailed in the rejections.

2. Please note claims 1-7 are pending.

Drawings

3. The drawings, amended May 1, 2009, are considered in compliance with 37 CFR 1.81 and accepted, as the amendment removes an appended remark page and the amendment makes no impact on the subject matter depicted in the set of drawings

originally filed.

Priority

4. Application filed February 25, 2005 has a national stage entry of PCT/JP04/09575 of international filing date June 30, 2004 and further claims a foreign priority to Japan Application 2003-188958, filed June 30, 2003, is acknowledged.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2156

5.1. Claim **7** is rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 7, the claim represents a computer readable temporary management program embodied on a computer readable medium causing a computer to perform association steps. The program is clearly not machine or an article of manufacture having physical supporting structure, are not a series of steps or acts to be a process, and nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When <u>functional</u> descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming <u>non-functional</u> descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because

Art Unit: 2156

"[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer").

With respect to the amendment made to claim 7 on May 1, 2009, the claim remains a program embodied on a readable medium. As grounds set forth previously for the rejections under 35 U.S.C. § 101, the subject matter claimed remains as a program. However, a program is a software product which is not statutory. Based on USPTO guidelines on 35 U.S.C. § 101 rejections, Examiner respectfully submits that a storage medium having a computer program stored thereupon causing a computer processor to perform method steps is considered an article of manufacture, of statutory category, as the subject matter claimed is a storage medium. However, a program embodied on a readable medium simply is a program and is not considered an article of manufacture, as the subject matter claimed is a program which is not of any statutory category.

5.2. Examiner respectfully acknowledges that claims 1-6 are of statutory, under 35 U.S.C. § 101.

As per claim 1, the claim describes a temporary storage management apparatus comprising of association means and association changing means, based on specification, which are CPU and are of physical structure. Therefore, claim 1 and dependents (claims 2-5) are of statutory category machine.

Art Unit: 2156

As per claim 6, the method claim perform association steps in which the steps tie to recording medium which belongs to statutory of manufacture category and the steps further transform its underlying subject matter, such as an article or manufacture, to a different state or thing. Therefore the claim is of statutory category of process.

Claim Rejections - 35 USC § 103

- **6.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6.1. Claims 1-2 and 5-7 are rejected are rejected under U.S.C. 103(a) as being unpatentable over Hori et al.: "SPECCIAL REPRODUCTION CONTROL INFORMATION DESCRIBING METHOD, SPECIAL REPRODUCTION CONTROL INFORMATION CREATING APPARATUS AND METHOD THEREFOR, AND VIDEO REPRODUCTION APPARATUS AND METHOD THEREFOR", U.S. Patent Application Publication 2003/0086692 A1, filed December 16, 2002 and published May 8, 2003, hereafter "Hori", in view of Higashi et al.: "CONTENT USAGE MANAGEMENT SYSTEM AND CONTENT USAGE MANAGEMENT METHOD", U.S. Patent Application Publication 2002/0107806 A1, filed February 2, 2002 and published August 8, 2003,

hereafter "Higashi".

As per claim 1, Hori teaches "A temporary storage management apparatus for disabling reproduction of copy protected content data and for managing temporary storage of the content data allowed to be temporarily stored in a recording medium so as to be reproducible only within a prescribed temporary storage allowable time" (See Fig. 6 and [0136] where video data and special reproduction control information are stored to contents storage unit, and further at [0036]-[0038] where a special reproduction is limited to specified frame and specified start/end times which disables reproduction of non-specified content), said temporary storage management apparatus comprising:

"association means for associating a first temporary storage start time out of temporary storage start times of prescribed parts of the content data with a reproducible start point indicating a start point from which the content data can be reproduced" (See Figs. 26-29, 49 and [0231]-[0232] where display time D'i is related with i-th frame content information which is associated with the reproduction time in the special reproduction control information and the i-th frame content is displayed when the display time is larger than a threshold display value in which the content is temporarily stored when the content is being displayed); and

"association changing means for re-associating another temporary storage start time following the temporary storage start time with the reproducible start point every time when a period from the temporary storage start time associated with the reproducible

start point to a current time reaches the temporary storage allowable time" (See Figs. 26-29, 49 and [0231]-[0233] where display time D'i is related with i-th frame content information which is associated with the reproduction time in the special reproduction control information and the i-th frame content is not displayed when the display time is not larger than a threshold display value, and the display time is added to the added display time of the i-th frame in which the a content is temporarily stored when the content is being displayed).

Page 7

Concerning "wherein parts of the content data stored longer than the temporary storage allowable time are unreproducible due to re-associating another temporary storage start time", Hori teaches setting content "unreproducible due to re-associating another temporary storage start time" by limiting a special reproduction to specified start and end times which disables content reproduction (See [0036]-[0038]), Hori does not explicitly teach "wherein parts of the content data stored longer than the temporary storage allowable time" causing the content unreproducible.

However, Higashi teaches "wherein parts of the content data stored longer than the temporary storage allowable time" (See [0104] wherein a license ticket implementation sets a maximum continuous usage duration for content reproduction process).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Higashi with Hori reference by implementing a feature of disabling content reproduction based on the content's maximum allowable storage time on Hori's system because the combined teaching of the two references would have enabled Hori's system to setup maximum content

storage allowable time during production such that unneeded content could have been disabled for reproduction and a waste of resource for content reproduction could have been prevented.

As per claim 6, the claim is directed to the document management method of claim 1 and therefore rejected along the same rationale.

As per claim 7, the claim is directed to the computer program product for functions of claim 1 and therefore rejected along the same rationale.

As per claim 2, the combined teaching of the Higashi and Hori references further teaches "The temporary storage management apparatus according to claim I, further comprising a volatile memory for storing information of the temporary storage start time associated with the reproducible start time" (See Hori: Fig. 3 and [0126]-[0127] where storage units may be optical or semiconductor memory for storing special reproduction control information).

As per claim 5, the combined teaching of the Higashi and Hori references further teaches "The temporary storage management apparatus according to claim 1, further comprising start time extraction means for sequentially extracting the temporary storage start time added to an inter frame encoded image, from the content data comprising video data created by sequentially compressing and encoding the prescribed parts each

Art Unit: 2156

having a plurality of frame images with a beginning as the inter frame encoded image" (See Hori: [0391] where image data is extracted and displayed and further [0186] where frame is extracted one after another).

6.2. Claim 3 is rejected are rejected under U.S.C. 103(a) as being unpatentable over Hori et al.: "SPECCIAL REPRODUCTION CONTROL INFORMATION DESCRIBING METHOD, SPECIAL REPRODUCTION CONTROL INFORMATION CREATING APPARATUS AND METHOD THEREFOR, AND VIDEO REPRODUCTION APPARATUS AND METHOD THEREFOR", U.S. Patent Application Publication 2003/0086692 A1, filed December 16, 2002 and published May 8, 2003, hereafter "Hori", in view of Higashi et al.: "CONTENT USAGE MANAGEMENT SYSTEM AND CONTENT USAGE MANAGEMENT METHOD", U.S. Patent Application Publication 2002/0107806 A1, filed February 2, 2002 and published August 8, 2003, hereafter "Higashi", as applied to claims 1-2 and 5-7 above; and further in view of Safadi et al.: "PERSONAL VERSATILE RECORDER: ENHANCED FEATURES, AND METHODS FOR ITS USE", U.S. Patent Application Publication 2002/0009285 A1, filed August 17, 2001 and published January 24, 2002, hereafter "Safadi".

As per claim 3, the combined teaching of the Higashi and Hori references teaches temporary storage management with respect to temporarily storage time as described previously.

The combined teaching of the Higashi and Hori references does not explicitly teach

Art Unit: 2156

"The temporary storage management apparatus according to claim 2, wherein said volatile memory stores encrypted key data used for encryption of the content data temporarily stored in said recording medium after being encrypted".

However, Safadi teaches encrypting or re-encrypting content and then storing the encrypted or re-encrypted content to a storage device, such as personal versatile recorder disk (See [0090]).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Safadi with Higashi and Hori references because the combined teaching would have enhanced data security with respect to viewing and pay-per-viewing media content.

6.3. Claim 4 is rejected are rejected under U.S.C. 103(a) as being unpatentable over Hori et al.: "SPECCIAL REPRODUCTION CONTROL INFORMATION DESCRIBING METHOD, SPECIAL REPRODUCTION CONTROL INFORMATION CREATING APPARATUS AND METHOD THEREFOR, AND VIDEO REPRODUCTION APPARATUS AND METHOD THEREFOR", U.S. Patent Application Publication 2003/0086692 A1, filed December 16, 2002 and published May 8, 2003, hereafter "Hori", in view of Higashi et al.: "CONTENT USAGE MANAGEMENT SYSTEM AND CONTENT USAGE MANAGEMENT METHOD", U.S. Patent Application Publication 2002/0107806 A1, filed February 2, 2002 and published August 8, 2003, hereafter "Higashi", as applied to claims 1-2 and 5-7 above; and further in view of Kaneko et al.: "CONTENT DOWNLOAD SYSTEM", U.S. Patent Application Publication 2002/0077899

Art Unit: 2156

A1, filed February 26, 2001 and published June 20, 2002, hereafter "Kaneko".

As per claim 4, the combined teaching of the Higashi and Hori references teaches temporary storage management with respect to temporarily storage time as described previously and further teaches "information recording means for, when copy allowed content data allowing copy without restrictions or copy one generation is recorded with the content data which is allowed to be temporarily stored" (See Hori: [0112] and [0155] where content reproduction is performed with combination of reproduction options and further at Hori: Fig. 3 and [0126]-[0127] where storage units may be optical or semiconductor memory for storing special reproduction control information)

The combined teaching of the Higashi and Hori references does not explicitly teach "recording history information of temporary storage of the content data and recording of the copy allowed content data in said recording medium".

However, Kaneko teaches using storage device to store history data of user operation or the like (See [0073]).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine the teaching of Kaneko with Higashi and Hori references because the combined teaching would have allowed content downloading being more flexible and specific customized to user's desire for obtaining main content and advertisement information.

The combined teaching of Kaneko, Higashi and Hori further teaches the following:

Art Unit: 2156

"determination means for, when a reproduction disabling detection time which is the temporary storage allowable time before the current time almost matches the temporary storage start time associated with the reproducible start point, determining based on the history information whether the content data was temporarily stored at the reproduction disabling detection time" (See Hori: Figs. 26-29, 49 and [0231]-[0233] where display time D'i is related with i-th frame content information which is associated with the reproduction time in the special reproduction control information and the i-th frame content is not displayed when the display time is not larger than a threshold display value, and the display time is added to the added display time of the i-th frame in which the a content is temporarily stored when the content is being displayed, and Kaneko: [0073] using storage device to store history data of user operation or the like), and "wherein said reproducible range updating means changes the temporary storage start time to be associated with the reproducible start point, depending on a determination result of the determination means, only when the content data was temporarily stored at the reproduction disabling detection time" (See Hori: Figs. 26-29, 49 and [0231]-[0232] where display time D'i is related with i-th frame content information which is associated with the reproduction time in the special reproduction control information and the i-th frame content is displayed when the display time is larger than a threshold display value in which the content is temporarily stored when the content is being displayed, and further at Fig. 3 and [0126]-[0127] where storage units may be optical or semiconductor memory for storing special reproduction control information).

Response to Arguments

7. Applicant's arguments filed May 1, 2009 have been fully considered, please see discussion below.

In the Remarks, Applicant "points out that this application is a National Stage of an International Application" and "requests the Examiner indicate acknowledgement of priority by marking boxes 12a(3) rather than box 12a(1) on PTOL-326".

With respect to the above remarks, Examiner thanks to Applicant for kindly reminding of the overlook and has respectfully corrected the error, among others, in the attached PTOL-326 form.

Concerning "As indicated above, page 9 of the drawings has been cancelled without prejudice. Applicant respectfully requests the Examiner approves the correction since page 9 only refers to the reference numerals of the drawings",

Examiner has acknowledged and accepted the amendment made to the drawings.

With respect to remarks "As indicated above, the Abstract has been amended to correct a minor informality. Therefore, Applicant respectfully requests the Examiner withdraws the objection to the Abstract.

As indicated above, the Specification has been amended to include cross

Application/Control Number: 10/525,664

Art Unit: 2156

reference to the foreign priority. Therefore, Applicant respectfully requests the Examiner withdraws the objection to the Specification",

Page 14

Examiner has respectfully withdrawn the objections.

Concerning 35 U.S.C. § 101 rejections to claim 7, Applicant argued that "As indicated above, claim 7 has been amended to be directed to statutory subject matter. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claim 7 under 35 U.S.C. § 101.

As indicated above, claims 1, 6 and 7 have been amended to make explicit what is implicit in the claims. The amendment is unrelated to a statutory requirement for patentability.".

As to the above argument, Examiner respectfully submits that the amendment made to claim 7 is related a statutory requirement for patentability and please refer to Examiner's remarks appended to the rejections on rationale why the rejections has been maintained.

With respect to rejections made to claims 1 and 6-7, Applicant remarked "Claim 1 claims a temporary storage management apparatus, claim 6 claims a temporary storage management method and claim 7 claims a computer readable temporary management program. The apparatus, method and program disable reproduction of copy protected content data by re-associating another temporary storage start time following a

temporary storage start time with a reproducible start point every time when a period reaches a temporary storage allowable time. The period is from the temporary storage start time associated with the reproduction start time to a current time. Parts of the content data stored longer than the temporary storage allowable time are therefore unreproducible.

By reassociating another temporary storage start time every time a period reaches a temporary storage allowable time so that parts of the content data stored longer than the temporary storage allowable time are unreproducible, as claimed in claims 1, 6 and 7, the claimed invention provides an apparatus, method and program which removes parts of the content data from a reproducible range when the allowable storage time has elapsed." and alleged that "The prior art does not show, teach or suggest the invention as claimed in claims 1, 6 and 7".

With respect to the above argument, Examiner respectfully submits that Hori does teach adjusting content display time for the portion allocated (See [0321]) and further at Figs. 26-29, 49 and [0231]-[0233] where display time D'i is related with i-th frame content information which is associated with the reproduction time in the special reproduction control information and the i-th frame content is not displayed when the display time is not larger than a threshold display value, and the display time is added to the added display time of the i-th frame in which the a content is temporarily stored when the content is being displayed. As per "another temporary storage start time every time a period reaches a

runs above allowed settings as stored content is unreproducible.

longer than the temporary storage allowable time are unreproducible",

Examiner further cited Higashi in which [0104] a license ticket implementation sets

maximum continuous usage duration, times a user can reproduce and accumulated

usage duration for content reproduction process. It is seen that the reproduction

Page 16

With respect to Applicant's further argument that "Claims 1-2 and 5-7 were rejected under 35 U.S.C. § 102 (b) as being anticipated by Hori, et al. (U.S. Publication No. 2003/0086692).

Hori, et al. appears to disclose reproduction of video contents having video data using special reproduction control information [0111]. The special reproduction is reproduction by a method other than a normal reproduction. A special reproduction includes a double speed reproduction, jump reproduction and trick reproduction [0112]. Content storage unit 25 stores at least video data and special reproduction control information [0136].

Thus, Hori, et al. merely discloses storing video data in a content storage unit 25 for special reproduction (non-normal reproduction). Nothing in Hori, et al. shows, teaches or suggests disabling reproduction of copy protected content data by allowing the content data to be temporarily stored and reproducible only within a prescribed allowable time as claimed in claims 1,

Application/Control Number: 10/525,664

Art Unit: 2156

6 and 7. Rather, Hori, et al. merely discloses a content storage unit 25 storing video data and special reproduction control information for non-normal reproduction such as double speed reproduction", Examiner respectfully submits previous position in responding to the most recently past argument.

Page 17

Finally but not lastly, Applicant concluded arguments by further pointing out that "Additionally, Hori, et al. appears to disclose determining whether a display time is larger than a threshold value of a preset display time [0231]. If the display time is larger, the video location information is displayed for D'i seconds [0232]. If the display time is not larger, the frame information which is not smaller than the threshold value is searched in a forward direction. During the search, the display time of the frame information which is smaller than the threshold value of the display time is all added to the display time of the frame information [0233].

Thus, Hori, et al. only discloses determining the <u>display time</u> of frame and if the display time is larger than a threshold value, displaying the frame.

Nothing in Hori, et al. shows, teaches or suggests re-associating another start time every time a period reaches a temporary storage allowable time as claimed in claims 1, 6 and 7. Rather Hori, et al. is directed to displaying information when a <u>display time</u> is larger than a threshold value. Nothing in Hori, et al. shows, teaches or suggests <u>changing</u> the start time when a

Art Unit: 2156

period reaches a storage allowable time.

Furthermore, Hori, et al. merely discloses that when the display time is not larger than a threshold value, adding the smaller display times to the display time of the frame information. Nothing in Hori, et al. shows, teaches or suggests that when parts of the content data are stored longer than the allowable time, the parts are unreproducible as claimed in claims 1, 6 and 7.

Rather, Hori, et al. merely discloses changing a display time. Hori, et al. does not disclose a storage allowable time.

Since Hori, et al. is directed to a special reproduction rate such as double time reproduction and is directed to a display time of a frame during the special reproduction, nothing in Hori, et al. shows, teaches or suggests (a) disabling reproduction of copy protection content data, (b) managing temporary storage of the content data to be reproducible only within a prescribed allowable time, (c) re-associating another storage start time every time a period reaches a temporary storage allowable time and (d) parts of the content data stored longer than the temporary allowable time are unreproducible as claimed in claims 1, 6 and 7. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 1, 6 and 7 under 35 U.S.C. § 102 (b).".

With respect to the argument, Examiner likes to respectfully point out that subject matter "changing the start time when a period reaches a storage

Art Unit: 2156

<u>allowable time</u> " as emphasized does not seem to be explicitly claimed and Applicant is certainly encouraged to further clarified the subject matter for further expediting prosecution process.

Concerning rejections made to dependent claims, Applicant seemed

suggesting that none of the rejections would stand by stating that "Claims 2 and 5 recite additional features. Applicant respectfully submits that claims 2 and 5 would not have been anticipated by Hori, et al. within the meaning of 35 U.S.C. § 102 (b) at least for the reasons as set forth above. Applicants respectfully requests the Examiner withdraws the rejection to claims 2 and 5 under 35 U.S.C. § 102 (b). Claim 3 was rejected under 35 U.S.C. § 103 as being unpatentable over Hori, et al. in view of Safadi, et al. (U.S. Publication No. 2002/0009285). Claim 4 was rejected under 35 U.S.C. § 103 as being unpatentable over Hori, et al. in view of Kaneko, et al. (U.S. Publication No. 2002/0077899). Applicant respectfully traverses the Examiner's rejection of claims 3 and 4 under 35 U.S.C. § 103. The claims have been reviewed in light of the Office Action and for reasons which will be set forth below, Applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue".

Without specifically repeating the rejections as made earlier, Examiner respectfully submits that rejections made to the dependent claims have

Art Unit: 2156

introduced additional reference(s) and, though the rejections may seem broad, however, reasonable.

References

- 8.1. The prior art made of record
 - A. U.S. Patent Application 2003/0086692
 - B. U.S. Patent Application 2002/0009285
 - C. U.S. Patent Application 2002/0077899
 - E. U.S. Patent Application 2002/0107806
- **8.2.** The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
 - D. U.S. Patent Number 6,396,508
 - F. U.S. Patent Application 2002/0120667

Conclusions

9. THIS ACTION IS MADE FINAL.

The Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2156

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is 571-272-3574 for faster service.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to KUEN S. LU whose telephone number is (571)-272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, Pierre Vital can be reached on (571)-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13

Published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should You have questions on access to the Private PAIR system; contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a

Art Unit: 2156

USPTO Customer Service Representative or access to the automated information system, please call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KUEN S. LU /Kuen S Lu/ Art Unit 2156

Primary Patent Examiner July 13, 2009